

01/20/01 03:50

0505

#54

OIEP

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/987,899

DATE: 11/21/2001

TIME: 10:09:42

P.5

Input Set : F:\sequence listing for 16517.258.txt

Output Set: N:\CRF3\11212001\I987899.raw

ENTERED

2 <110> APPLICANT: Cheikh, Nordine
 3 Liu, Jingdong
 4 Miller, Phillip W.
 5 O Connell, Keith M.
 7 <120> TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated
 8 With the Carbon Assimilation Pathway
 10 <130> FILE REFERENCE: 16517.258
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/987,899
 C--> 12 <141> CURRENT FILING DATE: 2001-11-16
 12 <150> PRIOR APPLICATION NUMBER: US 09/262,979
 13 <151> PRIOR FILING DATE: 1999-03-04
 15 <150> PRIOR APPLICATION NUMBER: US 60/076,712
 16 <151> PRIOR FILING DATE: 1998-03-06
 18 <160> NUMBER OF SEQ ID NOS: 7341
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 67
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Zea mays
 25 <220> FEATURE:
 26 <221> NAME/KEY: unsure
 27 <222> LOCATION: (1)...(67)
 28 <223> OTHER INFORMATION: unsure at all n locations
 30 <220> FEATURE:
 31 <223> OTHER INFORMATION: Clone ID: 700430856H1
 33 <400> SEQUENCE: 1
 W--> 35 cgacaccgtg ttaagttaat atataactgg tgcttttttat ttaanaaann naanaaaaaan 60
 37 aaaaaaa 67
 40 <210> SEQ ID NO: 2
 41 <211> LENGTH: 142
 42 <212> TYPE: DNA
 43 <213> ORGANISM: Zea mays
 45 <220> FEATURE:
 46 <223> OTHER INFORMATION: Clone ID: 700433144H1
 48 <400> SEQUENCE: 2
 50 ctctatacct gctgctacaa aactactgca acgcctatat atacatgggg tgaggaacat 60
 52 gtgaatgcaa gctccggcta tcatatacat gtaatatgga tacaaactat atatataaat 120
 54 ccgccgaggg gccgacaata ct 142
 57 <210> SEQ ID NO: 3
 58 <211> LENGTH: 142
 59 <212> TYPE: DNA
 60 <213> ORGANISM: Zea mays
 62 <220> FEATURE:
 63 <223> OTHER INFORMATION: Clone ID: 700433148H1
 65 <400> SEQUENCE: 3
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 69 gtgaatgcaa gctccggcta tcatatacat gtaatatgga tacaaactat atatataaat 120
 71 ccgccgaggg gccgacaata ct 142

RAW SEQUENCE LISTING

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Input Set : F:\sequence listing for 16517.258.txt

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74 <210> SEQ ID NO: 4
75 <211> LENGTH: 319
76 <212> TYPE: DNA
77 <213> ORGANISM: Zea mays
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Clone ID: 700098783H1
82 <400> SEQUENCE: 4
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86 ggcctcgtcg gccaccgccc tcgctccgtt ccaggggctc aagtcaccg ccagcctccc    120
88 cgtcgcccg cgtcctccca gaagcctcgg caacgtcagc aacggcgga ggatccggtg    180
90 catgcagggtg tggccggcct acggcaacaa gaagttcgag acgtgtcgt acctgacgcc    240
92 gctgtcgacg gacgacctgc tgaagcaggt ggactacctg ctgcgcaacg gctggatacc    300
94 ctgcctcgag ttcagcaag                                     319
97 <210> SEQ ID NO: 5
98 <211> LENGTH: 323
99 <212> TYPE: DNA
100 <213> ORGANISM: Zea mays
102 <220> FEATURE:
103 <223> OTHER INFORMATION: Clone ID: 700097213H1
105 <400> SEQUENCE: 5
107 cgacctgctg aagcagggtg actacctgct gcgcaacggc tggataccct gcctcgagtt    60
109 cagcaaggtc ggcttcgtgt accgcgagaa ctccacctcc ccgtgctact acgacggccc    120
111 ctactggacc atgtggaagc atgcccattg tcggctgcaa cgacgccacc caggtgtaca    180
113 aggagctgca ggaggccatc aaatcctacc cggacgcctt ccaccgcgtc atcggttctg    240
115 acaacatcaa gcagacgcag tgcgtcagct tcatcgccca caagcccccg ggcagcgact    300
117 agaccgcgcc cgccggccgc ccc                                     323
120 <210> SEQ ID NO: 6
121 <211> LENGTH: 330
122 <212> TYPE: DNA
123 <213> ORGANISM: Zea mays
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Clone ID: 700097673H1
128 <400> SEQUENCE: 6
130 gcttgccatg gcgcccaccg tgatgatggc ctgctcggca accgccgtcg ccccgttcca    60
132 ggggtctcaag tccgcccga gccctcccgt cgcccgcgc agcaccagga gcctcggcaa    120
134 cgtcagcaac ggcggaagga tccggtgcat gcagggtgtg ccggcctacg gcaacaagaa    180
136 gttcgagacg ctgtcgtacc tgccgcccgt gtcgacggac gacctgctga agcagggtgga    240
138 ctacctgctg cgcaacgggt ggataccctg cctcgagttc agcaagctcg ggttcgtgta    300
140 ccgcgagaac tccacctccc cgtgctacta                                     330
143 <210> SEQ ID NO: 7
144 <211> LENGTH: 310
145 <212> TYPE: DNA
146 <213> ORGANISM: Zea mays
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Clone ID: 700101767H1
151 <400> SEQUENCE: 7
153 agcaagcaag ctcgatctac tactactact agctggtaga catactagcc agcctgccag    60
155 ccagcttgcc atggcgccca ccgtgatgat ggctcgctcg gcaaccgccg tcgccccgtt    120
157 ccagggtctc aagtccgccg ccagcctccc cgtcgccgc gcgacacca ggagcctcgg    180

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159 caacgtcagc aacggcgga g gatccgggtg catgcagggtg tggccggcct acggcaacaa 240
161 gaagttcgag acgctgtcgt acctgccgcc gctgtcgacg gacgacctgc tgaagcaggt 300
163 ggactacctg 310
166 <210> SEQ ID NO: 8
167 <211> LENGTH: 318
168 <212> TYPE: DNA
169 <213> ORGANISM: Zea mays
171 <220> FEATURE:
172 <223> OTHER INFORMATION: Clone ID: 700100001H1
174 <400> SEQUENCE: 8
176 gtcgcccgcc gcagcaccag gagcctcggc aacgtcagca acggcggaag gatccgggtg 60
178 atgcagggtgt ggccggccta cggcaacaag aagttcgaga cgctgtcgta cctgccgccg 120
180 ctgtcgacgg acgacctgct gaagcagggtg gactacctgc tgcgcaacgg ctggataccc 180
182 tgcctcgagt tcagcaagct cgggttcgtg taccgcgaga actccacctc cccgtgctac 240
184 tacgacggcc gctactggac catgtggaag ctgcccatgt tcggctgcac cgacgccacg 300
186 caagtgtaca aggagctg 318
189 <210> SEQ ID NO: 9
190 <211> LENGTH: 316
191 <212> TYPE: DNA
192 <213> ORGANISM: Zea mays
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Clone ID: 700097382H1
197 <400> SEQUENCE: 9
199 agcaagcaag cagcgagtac atacatacta ggcagccagg cagccatggc gcccaccgtg 60
201 atgatggcct cgtcggccac cgccgtcgtt ccgttccagg ggctcaagtc caccgccagc 120
203 ctccccatcg cccgcgcgtc ctccagaagc ctccggcaacg tcagcaacgg cggaaggatc 180
205 cgggtgcatgc aggtgtggcc ggcctacggc aacaagaagt tcgagacgct gtcgtacctg 240
207 ccgccgctgt cgacggacga cctgctgaag cagggtggact acctgctgcg caacggctgg 300
209 ataccctgcc tcgagt 316
212 <210> SEQ ID NO: 10
213 <211> LENGTH: 317
214 <212> TYPE: DNA
215 <213> ORGANISM: Zea mays
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Clone ID: 700099925H1
220 <400> SEQUENCE: 10
222 agcaagcaag caagcagcga gtacatacat actaggcagc caggcagcca tggcgcccac 60
224 cgtgatgatg gcctcgtcgg ccaccgccgt cgctccgttc caggggctca agtccaccgc 120
226 cagcctcccc gtcgcccgcc gctcctccag aagcctcggc aacgtcagca acggcggaag 180
228 gatccgggtg atgcagggtg ggccggccta cggcaacaag aagttcgaga cgctgtcgta 240
230 cctgccgccg ctgtcgacgg acgacctgct gaagcagggtg gactacctgc tgcgcaacgg 300
232 ctggataccc tgccctg 317
235 <210> SEQ ID NO: 11
236 <211> LENGTH: 315
237 <212> TYPE: DNA
238 <213> ORGANISM: Zea mays
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Clone ID: 700098235H1
243 <400> SEQUENCE: 11

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RAW SEQUENCE LISTING

DATE: 11/21/2001

PATENT APPLICATION: US/09/987,899

TIME: 10:09:42

Input Set : F:\sequence listing for 16517.258.txt

Output Set: N:\CRF3\11212001\I987899.raw

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245 caagcaagca agcagcgagt acatacatag taggcagcca ggcagccatg ggcggccaccg 60
247 tgatgatggc ctgcgcggcc accgccgtcg ctccgttcca ggggctcaag tccaccgcc 120
249 gcctccccgt cgcggccgc tcctccagaa gcctcggcaa cgtcagcaac ggcggaagga 180
251 tccggtgcat gcaggtgtgg ccggcctacg gcaacaagaa gtctgagacg ctgtcgtacc 240
253 tgccgcccgt gtcgacggac gacctgctga agcaggtgga ctacctgctg cgcaacggct 300
255 ggataccctg cctcg 315
258 <210> SEQ ID NO: 12
259 <211> LENGTH: 302
260 <212> TYPE: DNA
261 <213> ORGANISM: Zea mays
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Clone ID: 700093043H1
266 <400> SEQUENCE: 12
268 gcaagctcga tctactacta ctactagctg gtacacatac tagccagcct gccagccagc 60
270 ttgccatggc gccaccgtg atgatggcct cgtcggcaac cgcgctcgcc ccgttccagg 120
272 gtctcaagtc cgcggccagc ctcccgcgtg cccgcccag caccaggagc ctcggaacg 180
274 tcagcaacgg cggaaggatc cgggtgcatgc aggtgtggcc ggcctacggc aacaagaagt 240
276 tcgagacgct gtcgtacctg ccgccgctgt cgacggacga cctgctgaag caggtggact 300
278 ac 302
281 <210> SEQ ID NO: 13
282 <211> LENGTH: 315
283 <212> TYPE: DNA
284 <213> ORGANISM: Zea mays
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Clone ID: 700089802H1
289 <400> SEQUENCE: 13
291 agcaagcaag cagcgagtac atacatacta ggcagccagg cagccatggc gccaccgtg 60
293 atgatggcct cgtcggccac cgcgctcgct ccgttccagg ggctcaagtc caccgccagc 120
295 tccccgtcgc ccgccgctcc tccagaagcc tcggcaacgt cagcaacggc ggaaggatcc 180
297 ggtgcatgca ggtgtggccg gcctacggca acaagaagtt cgagacgctg tcgtacctgc 240
299 cgcgctgtc gacggacgac ctgctgaagc aggtggacta cctgctgcgc aacggctgga 300
301 taccctgcct cgagt 315
304 <210> SEQ ID NO: 14
305 <211> LENGTH: 297
306 <212> TYPE: DNA
307 <213> ORGANISM: Zea mays
309 <220> FEATURE:
310 <223> OTHER INFORMATION: Clone ID: 700101196H1
312 <400> SEQUENCE: 14
314 gccaggcagc catggcgccc accgtgatga tggcctcgtc ggccaccgcc gtcgtccgt 60
316 tccaggggct caagtccacc gccagcctcc ccgtcggccg ccgtccctcc agaagcctcg 120
318 gcaacgtcag caacggcgga aggatccggt gcatgcaggt gtggccggcc tacggcaaca 180
320 agaagttcga gacgtgtcg tacctgccgc cgtgtcgac ggacgacctg ctgaagcagg 240
322 tggactacct gctgcgcaac ggctggatac cctgcctcga gttcagcaag gtcggct 297
325 <210> SEQ ID NO: 15
326 <211> LENGTH: 309
327 <212> TYPE: DNA
328 <213> ORGANISM: Zea mays
330 <220> FEATURE:

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Input Set : F:\sequence listing for 16517.258.txt

Output Set: N:\CRF3\11212001\I987899.raw

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331 <223> OTHER INFORMATION: Clone ID: 700097309H1
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337 tgatgatggc ctgctcgcc accgcgctcg ctccgttcca ggggtcaag tccaccgcc 120
339 gcctccccgt cgcgcgcgc tcctccagaa gcctcggcaa cgtcagcaac ggcggaagga 180
341 tccggtgcat gcaggtgtgg ccggcctacg gcaacaagaa gtctgagacg ctgtcgtacc 240
343 tgccgcgct gtcgacggac gacctgctga agcaggtgga ctacctgctg cgcaacggct 300
345 ggataccct 309
348 <210> SEQ ID NO: 16
349 <211> LENGTH: 305
350 <212> TYPE: DNA
351 <213> ORGANISM: Zea mays
353 <220> FEATURE:
354 <223> OTHER INFORMATION: Clone ID: 700100270H1
356 <400> SEQUENCE: 16
358 agcaagcagc gactacatag atactaggca gccaggcagc catggcgccc accgtgatga 60
360 tggcctcgtc ggccaccgcc gtcgctccgt tccaggggct caagtccacc gccagcctcc 120
362 ccgtcgcccg ccgctcctcc agaagcctcg gcaacgtcag caacggcgga aggatccggt 180
364 gcatgcaggt gtggccggcc tacggcaaca agaagttcga gacgctgtcg tacctgccgc 240
366 cgctgtcgac ggacgacctg ctgaagcagg tggactacct gctgcgcaac ggctggatac 300
368 cctgc 305
371 <210> SEQ ID NO: 17
372 <211> LENGTH: 312
373 <212> TYPE: DNA
374 <213> ORGANISM: Zea mays
376 <220> FEATURE:
377 <223> OTHER INFORMATION: Clone ID: 700208152H1
379 <400> SEQUENCE: 17
381 caacgcgtcc gggacctggg caagcaagct cgatctacta ctactactag ctggtacaca 60
383 tactagccag cctgccagcc agcttgccat ggcgcccacc gtgatgatgg cctcgtcggc 120
385 aaccgcgctc gcccgttcc aggtctcaa gtccgcccgc agcctccccg tcgcccgcgc 180
387 cagcaccagg agcctcggca acgtcagcaa cggcggaagg atccggtgca tgcaggtgtg 240
389 gccggcctac ggcaacaaga agttcgagac gctgtcgtac ctgcccgcgc tgtcgacgga 300
391 cgacctgctg aa 312
394 <210> SEQ ID NO: 18
395 <211> LENGTH: 322
396 <212> TYPE: DNA
397 <213> ORGANISM: Zea mays
399 <220> FEATURE:
400 <221> NAME/KEY: unsure
401 <222> LOCATION: (1)...(322)
402 <223> OTHER INFORMATION: unsure at all n locations
404 <220> FEATURE:
405 <223> OTHER INFORMATION: Clone ID: 700215709H1
407 <400> SEQUENCE: 18
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411 agccagcttg ccatggcgcc caccgtgatg atggcctcgt cggcaaccgc cgtcgccccg 120
413 ttccagggtc tcaagtccgc cgccagcctc ccgctcgccc gccgcagcac caggagcctc 180
415 ggcaacgtca gcaacggcgg aaggatccgg tgcattcagg tgtggccggc ctacggcaac 240

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Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/987,899

DATE: 11/21/2001

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Input Set : F:\sequence listing for 16517.258.txt

Output Set: N:\CRF3\11212001\I987899.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:35 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1494 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:1498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:2159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100
L:2204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108
L:2391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:2395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:2609 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2611 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2613 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122
L:2704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:126
L:2747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:128
L:2831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2837 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2839 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131
L:2863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2867 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132
L:2893 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133
L:2969 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:136
L:3016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3018 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3026 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3028 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3048 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139

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L:3054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3056 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3058 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139
L:3060 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139